

AMENDMENT AND RESPONSE
U.S. Serial No. 09/932,201
Filed: August 17, 2001

AMENDMENTS IN THE CLAIMS

Please cancel claims 18, 22, 24, 25, 27, 33, and 34 without prejudice.

1. (Currently Amended) A commutator comprising:
 - a. at least one magnet comprising a thermo-set resin; and
 - b. a commutator core comprising a thermo-set resin,wherein the at least one magnet is chemically-bonded to the commutator core via inter-bonding of the thermo-set resins in the at least one magnet and the core.
2. (Original) The commutator of claim 1, wherein the at least one magnet facilitates the collection of information regarding properties of the motor.
3. Cancelled.
4. (Previously Presented) A sensing assembly comprising the commutator of claim 1 and a sensor.
5. (Previously Presented) The commutator of claim 37, wherein the metal comprises copper.
6. Cancelled.
7. Cancelled.

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8. (Previously Presented) The commutator of claim 35, wherein at least one of the electrically-conductive segments comprises an inner surface and at least one anchor extending radially inwardly from the inner surface of the segment.
9. Cancelled.
10. (Previously Presented) The commutator of claim 35, wherein the magnet comprises electrically non-conductive material.
11. Cancelled.
12. (Previously Presented) The commutator of claim 35, wherein the magnetic powder comprises strontium ferrite.
13. (Previously Presented) The commutator of claim 35, wherein the magnetic powder comprises barium ferrite.
14. Cancelled.
15. Cancelled.
16. Cancelled.

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17. (Previously Presented) The commutator of claim 35, wherein the electrically-conductive commutator segments comprise a carboneous material.

18. Cancelled.

19. (Original) The sensing assembly of claim 4, further comprising a magnetic sensor.

20. (Original) The sensing assembly of claim 19, wherein the sensor comprises a variable reluctance sensor.

21. (Original) The sensing assembly of claim 19, wherein the sensor comprises a Hall-Effect sensor.

22.-29. Cancelled.

30. (Previously Presented) The commutator of claim 1, wherein the at least one magnet is a substantially continuous ring.

31. (Previously Presented) The commutator of claim 35, wherein the at least one magnet is a substantially continuous ring.

32.-34. Cancelled.

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35. (Currently Amended) The commutator of claim 1, further comprising a plurality of electrically-conductive commutator segments, wherein the [electrically-insulating] commutator core [comprises an electrically-insulated thermo-set resin] is positioned adjacent the segments and defines a central aperture and wherein the at least one magnet further comprises magnetic powder [and a thermo-set resin chemically bonded to the commutator core by inter-bonding of resins of the commutator core and magnet].

36. (Previously Presented) The commutator of claim 35, wherein the core is molded in contact with the at least one magnet.

37. (Previously Presented) The commutator of claim 35, wherein the commutator segments comprise metal.

38. (Previously Presented) The commutator of claim 35, wherein the commutator comprises a barrel and a face and wherein the electrically-conductive commutator segments are positioned on the barrel of the commutator and the at least one magnet is positioned on the face of the commutator.

39. (Currently Amended) [The commutator of claim 35] A commutator comprising at least one magnet chemically-bonded to an electrically-insulating commutator core and further comprising a plurality of electrically-conductive commutator segments, wherein the electrically-insulating commutator core comprises an electrically-insulating thermo-set resin positioned adjacent the segments and defines a central aperture and wherein the at least one magnet

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comprises magnetic powder and a thermo-set resin chemically bonded to the commutator core by inter-bonding of resins of the commutator core and magnet, wherein the commutator comprises a barrel and a face and wherein the electrically-conductive commutator segments are positioned on the face of the commutator and the at least one magnet is positioned on the barrel of the commutator.